

RF Expansion Module

for Cassidian ATEC® Series 6 ATE

AEROFLEX
A passion for performance.



The RF Expansion Module (RFEM) is a new product capability designed to support testing of airborne RF components on the ATEC® Series 6 ATE. Developed and manufactured by Aeroflex Test Solutions in partnership with the Test & Services activities inside Cassidian, the RFEM provides a convenient platform that is completely compatible with new and existing ATEC® Series 6 ATE systems that use the Cassidian test executive environment.

A library of TPS solutions is currently in development by Aeroflex that will eventually cover the full range of navigation, communication, TCAS, transponder, and other RF systems. The product strategy has full OEM support and CMM listing.

Key Customer Advantages

- Aeroflex designed RF test system, fully integrated into the ATEC® Series 6
- Simple Ethernet interface between RFEM and ATEC® Series 6, permits easy retrofit to existing ATE installations
- Cassidian test executive interface offers many advantages to the test operator
- Global service and support provided jointly by Cassidian and Aeroflex
- Extensive CMM-listed TPS library in development or planned, covering Nav, Comm, TCAS, Transponder, SATCOM, GPS, and other RF systems
- Complete RFEM and TPS information can be consulted on the Cassidian Customer Support and Services MyATE Internet web site
- Our objective is to offer test coverage of RF products from all major OEMs



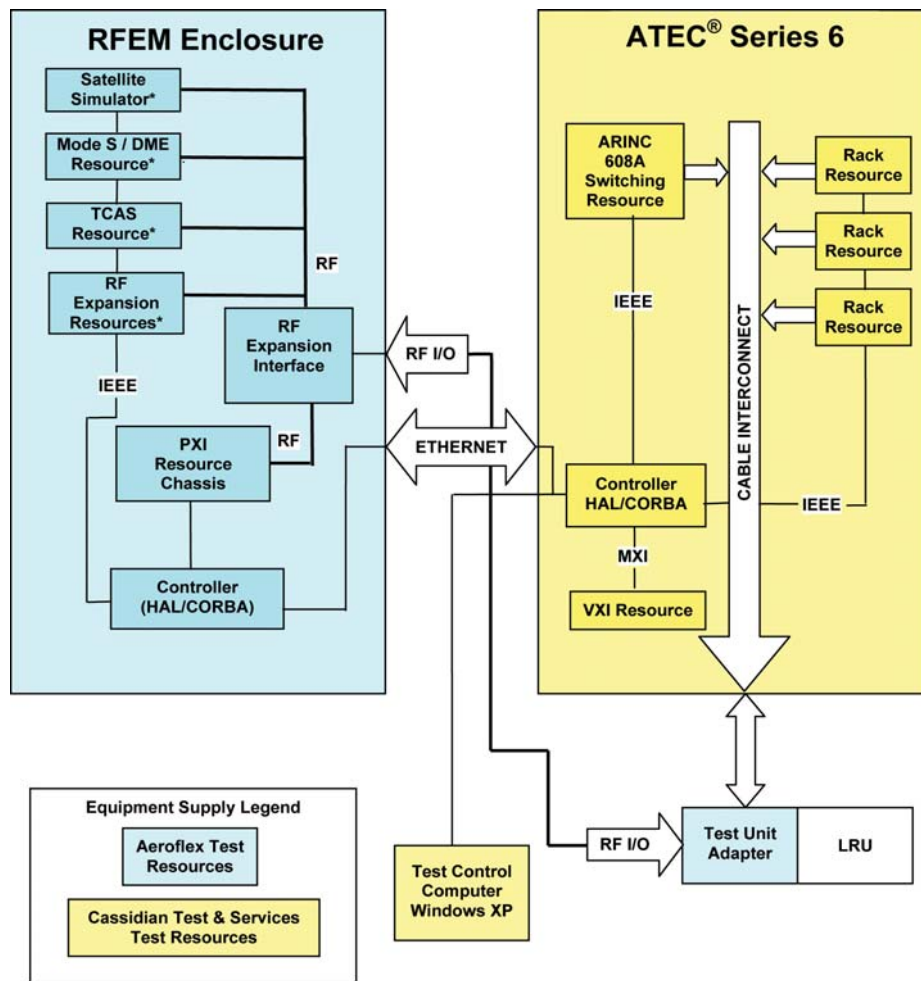
Figure 1. Aeroflex 3000-Series PXI Modules

The RF instrumentation package includes the new Aeroflex PXI format synthetic instrument modules for both signal generation and analysis (Fig. 1). These products offer very high performance in a compact size, permitting greater resource density in the RFEM tower.

In partnership with



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* Optional

Figure 2. ATEC® Series 6 – RFEM System Interface Design

GENERAL RFEM SPECIFICATIONS

USER INTERFACE

Display and controls are provided via the ATEC® Series 6 operator console PC. The Test Unit Adapters (TUAs) for individual RF units, designed and manufactured by Aeroflex, mount to the ARINC 608A matrix switch on the ATEC® Series 6 tower. A TUA cable transfers all RF signals between the TUA and test resources via an RF expansion interface in the RFEM. The interface panel has been designed to accommodate significant future growth. Visual, guided operator instructions for each RF unit are presented in the Cassidian test executive system software.

AEROFLEX INSTRUMENTATION

The PXI instruments included in the RFEM are part of a full suite of RF instruments developed by Aeroflex for the aerospace and wireless industries. The broad industry adoption of Aeroflex PXI test resources benefits the user through economies of scale and performance.

The following instruments and standard PXI modules have been selected for use in the RFEM:

ATEP-3021C PXI High Power RF Digital Signal Generator w/Opt 100 (100 kHz - 3 GHz)

ATEP-3035C PXI Wideband RF Digitizer (0.25 MHz - 6 GHz)

ATEP-3010 PXI RF Synthesized Signal Generator

ATEP-3011 PXI RF Synthesized Signal Generator (including OCXO high stability 10 MHz reference)

ATEP-3001B PXI System Controller 2.0 GHz, 1.5 MB RAM

SDX-2000-RC-110 ATC / DME RF Test Set (Rear Conn)

GNS-743A-1-110 GPS Satellite Simulator 1 Channel

OPTIONS AND ACCESSORIES

Each Test Unit Adapter kit is supplied complete with software, adapter hardware, interface cable and self-test adapter.

Current TPS Library

Function	LRU Model	Airframes	OEM Documentation*	TPS Run Time est.
Radio Altimeter	ALA-52B	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 066-50007-xx CMM 34-42-37 ATP 076-1132-001_A TRD 004-50331-0001 Issue D	30 min
DME	DMA-37B	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 066-50013-xx CMM 34-51-37 ATP_076_1130_001 TRD_004_50356_H	60 min
ADF	DFA-75B	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 066-50014-xx CMM 34-53-35 ATP_076-1128-001_A TRD_004-50366_F	30 min
Navigation Receiver	INR	787, all air transport types	Honeywell P/N 940-2001-xx CMM 34-53-37 ATP_076-1136-001_B TRD_058-0271-000_D	120 min
VHF COMM/DATA	RTA-44D	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 064-50000-xx CMM: 23-20-38 Test Specification: 004-50335_M TRD: 004-50336_K	120 min
VOR	RVA-36B	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 066-50012-xx CMM: 34-55-34 TS: 004-50326_F TRD: 004-50327_C	30 min
VHF COMM / DATA	RTA-50D	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 965-1696-xx CMM 23-20-56	120 min
Mode-S Transponder	TRA-67A	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 066-01127-xx CMM 34-54-36 TP 076-1014-000 Rev: G CTA: TELI p/n 8070178-0039	170 min
Mode-S Transponder	MST-67A	Regional and Business Aviation	Honeywell P/N 066-01143-xx CMM 34-54-02 MPS 004-00886-0000 Rev: AC	170 min

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Function	LRU Model	Airframes	OEM Documentation*	TPS Run Time est.
TCAS	TPA-81A	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 066-50000-xx CMM 34-45-45 TRD 00450018-0049	150 min
TCAS	TPA-100A	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 940-0300-xx P/N 940-0400-xx	150 min
TCAS	TPA-100B	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, 787, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 940-0351-xx P/N 940-0451-xx	150 min
Multi-Mode Receiver	RMA-55B	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell P/N 066-50029-xx	120 min
TCAS	TPU-67A	Regional Business Aviation	Honeywell	150 min
ILS	RIA-35B	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, A300/310/320/330/340, DC9/10, MD11/80/90, Military	Honeywell	30 min
TCAS	RT-950	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, A300/310/320/330/340, DC9/10, MD11/80/90, Military	ACSS	90 min
Mode-S Transponder	XS-950	707, 717, 727, 737CL, 737NG, 747, 757, 767, 777, A300/310/320/330/340, DC9/10, MD11/80/90, Military	ACSS	40 min

Completed
In Development
Under Discussion with Customers

* Please consult factory for detailed information on LRU and P/N coverage.

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Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.

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